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ROLE OF HOUSEHOLD SURVEYS IN NATIONAL STATISTICAL SYSTEMS*

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INTRODUCTION

1. The role of household surveys in national statistical systems depends to a considerable extent on the manner these statistics are organized and on the level of development accomplished. The more centralized the statistics, the less difficult it will be to establish uniform concepts, definitions, reference periods, etc. Decentralization of data collection and data processing may have advantages in regard to certain aspects of administration and organization but methodological co-ordination and technical co-operation are more difficult to achieve than in a centralized system. A high extent of collaboration and some kind of mechanism are then required.

2. As these characteristics differ widely among the countries, it is particularly difficult to make statements of general character. The following will consequently refer frequently to a specific system with different and exactly defined household surveys and to a large number of other subject statistics. The statistical system shown corresponds widely to the situation of the official statistics in the Federal Republic of Germany.

3. Chart 3, for instance, presents the organizational implication among the different housing surveys, the Population Census, the Building and Housing Census, the Establishment Census and the Agriculture Census as well as the interplay of the household surveys among each other according to the German overall system.

4. Also the connections among household surveys, other primary statistics and administrative records as they are explained in the different sections of this paper, refer in most cases though implicitly to a certain statistical system. On the other hand nearly all topics of this Seminar are to and will make allowance for the role of household surveys in national statistical systems. It is for this reason that this paper deals merely with examples and partial aspects. As far as mention is made of certain statistics, it will be possible to incorporate those into the general system "Possible courses of reporting" (Chart 2).

NECESSITY OF INTERCENSAL HOUSEHOLD SURVEYS

5. Experience acquired in many countries over the last three decades has shown that the population census and other censuses in their "classical" form of a periodical inquiry held with complete coverage at intervals of five to ten years are insufficient. It is no longer suited to meet the steadily increasing requirements made on official statistics. The reasons for this may be listed under the following two headings:

- Increasing requirements for information
- Changing requirements for information

Changing requirements for information mean both that the needs for up-to-date information on current developments has grown and that the needs for information are subject to more rapid changes.

6. The steadily increasing requirements for information and the changes in the kinds of information needed are generally conditioned by the economic and social development as well as by the population development. The differentiated structure of the society, the dynamic economy, the migration across national frontiers, the high mobility of the population, the strong fluctuation between the various sectors of economy and social strata must be mentioned in this connexion. In order to observe and direct these developments, administration (information for developing and monitoring programmes), economy and science therefore require highly differentiated quantitative material; this must be available at short notice and provide answers to the most topical questions of a given period. The census proves to be a much too unwieldy instrument for this purpose.

7. The increasing and changing needs for information as well as the necessity of up-to-date information have two consequences. First they advance the development and the introduction of statistical methods by which these requirements can be met. These are essentially sampling methods and more or less administrative records and different kinds of registers. On the other hand, the development of such methods offers the advantage to restrict the censuses themselves to the classical characteristics as well as to the major data required in each case in the field of demographic occupational housing and other statistics.

8. Thus it is possible to disencumber the census questionnaire insofar as it has to be answered by all households and all persons. There are two different ways of achieving this aim of which only the second is, however, of interest in the context of the present paper.

9. The first possibility consists in restricting the household schedule to be answered by all households to the major data in the field of demographic occupational housing and other statistics as well as to those needed in a more detailed breakdown. More detailed questions are addressed only to a sample of households.

10. The second possibility is provided by intercensal sample inquiries which follow the census. These intercensal sample inquiries can serve various purposes. They will be discussed in detail in this Seminar.

THE RELATIONSHIP BETWEEN CENSUSES AND A CONTINUING HOUSEHOLD SURVEY (MPS)
(Tasks of the censuses and the Household Survey)

11. We shall now deal with the functioning of the system of intercensal sample inquiries. First we shall briefly explain the tasks of population census and then the "division of labour" which has developed between census and Household Survey.

12. The population census supplies at longer intervals the basic information in the most detailed breakdown for communes and enumeration districts. It also provides highly differentiated material, e.g., the economically active population by sex, age - not only by age groups - and occupation according to about 320 occupational categories.

13. The census therefore constitutes the most important basis for differentiated regional data which are needed for regional planning and other purposes. The census also serves other technical purposes. In many countries it is the basis for the current adjustment of the population and for population sample surveys.

14. The German multi-subject HS (MPS, microcensus Chart 3) as an intercensal sample inquiry has the following tasks:

(a) The MPS and the census control one another
(b) By means of the MPS the results of the census are currently adjusted
(c) The MPS disencumbers and supplements the census
(d) The microcensus represents a current pilot survey for the preparation of the census.

If intercensal sample inquiries are to supplement the census, it is necessary to observe the following points, in order to ensure the comparability of the results supplied by the census and the MPS:

- Date of census or MPS
  (are the sample inquiries conducted at the same data as the census or at a date near to that of the census?)
- Definitions used
- Comparability of the method of data collection
- Sampling frame

15. For this purpose it was necessary to reconcile the wording of questions, the definitions and the classifications of the census and the MPS with each other. The census was moreover used as a basis for the MPS-sample.

16. It was intended to link the census to be held around 1980 even more closely together with the MPS than has already been possible in 1960 and 1970 and to make use of the results supplied by the follow-up surveys of the MPS for the preparation of the census.

(a) The MPS controls the census

17. The last census was taken on May 27, 1970. MPS were held in April and July of the same year. It was possible to check against one another the results relating to characteristics which had been recorded in both enumerations.

18. In order to control the completeness of the census-results, sample checks were made in communes and enumeration districts determined by random selection as a sub-sample of the first stage of the MPS.

19. In order to control the answers relating to major characteristics, the questionnaires of the population census and those of the microcensus surveys of April and July were brought together and checked for consistency.

(b) The microcensus shows the trend

20. Current intercensal sample inquiries provide at longer or shorter intervals intercensal results. The dates and thus the intervals at which these results will be available depend on the system inquiries planned between the different census dates.

21. In the MPS the most important items of demographic and occupational statistics are determined for the Federation and the regions under the basic programme once a year in the 1 per cent sample. On a quarterly basis 0,1 per cent - data were only given for the Federation (till 1974).

(c) The MPS disencumbers and supplements the census

22. Data for which more detailed regional breakdowns are either not necessary or inexpedient can more easily be collected in sample surveys. Pilot surveys for the census have, for example, shown that questions relating to the type and extent of social insurance were answered in a very unsatisfactory way because the legal situation is very complicated. The information provided by respondents on disablement were also very incomplete. These questions were therefore included in the MPS, because there it is possible for the interviewers to advise the respondents and to check to some extent the information given. For legal reasons it was not possible to include questions pertaining to fertility (number of live-born children according to the age of the mother, duration of marriage, etc.) into the census, whereas these subjects could be made part of a 1 per cent survey of the MPS.

23. In addition to the questions which are contained in the basic programme of the microcensus and therefore not repeated in the census, the supplementary programmes also offer a very effective means of disencumbering the census (see §§ 54 f).

INTERCENSAL SAMPLE INQUIRIES WITHIN A SYSTEM OF POPULATION STATISTICS

(a) Current statistics relating to the population

24. If in the framework of official statistics current household surveys relating to the population are introduced, then - generally speaking - a more or less broadly based system of population statistics is already in existence. This sytem mainly consists of the statistics of vital events and migration in connection with the current adjustment of the population. This brings us to the question of the position which intercensal sample inquiries have in such a system. The position and function of the census in connection with intercensal sample inquiries have already been dealt with. In order to describe the whole system, the more important types of statistics in the system of population statistics mentioned before have to be explained briefly.

25. Current statistics recording primarily such events as births, deaths, marriages, arrivals, departures, are the basis for the current adjustment of the population. Thus they are closely inter-related in many ways both with the census and with the MPS.

26. In order to understand the role of the census and the MPS within the system of official population statistics, it is important to know that the population data of the FRG and in countries with similar statistical systems are currently adjusted every month according to sex. The basis for this adjustment are the census results for the individual communes. It is a legal obligation for every person who changes his place of residence to register with the police at the former and the new place of residence. The number of inhabitants of each commune can thus be annually determined by adding births and arrivals and substracting deaths and departures. The results of the current adjustment provide the basis for raising the results of the sample to the total population.

(b) The inter-relationships of the different statistics

27. After a description of the individual statistics the system as a whole will be described. Chart 1 shows in a schematic way the inter-relationships of the intercensal sample inquiries with the census and the current statistics of vital events and migration. Both the census and the microcensus provide information on the number and structure of the population. The current adjustment using information obtained from the statistics of vital events and migration makes possible a permanent observation of the population development, the results of which are also made use for raising the MPS figures. The MPS disencumbers the census and will also supplement the census results (see §§ 22 f).

28. The system of inter-related collection techniques, as it has been described here, must be tailored to measure and adapted to the prevailing situation.

29. It will of course never be quite possible to present a general picture of demographic and social conditions in all their details, the number of the population, the structures and the various changes. If handled with skill, it will however be possible to gather statistically in such a net of different and interpenetrating survey techniques the most relevant developments. This statistical network can be extended for the purposes of social research. Surveys of social research institutes could be based on the address-material of the MPS. The questions covered in these surveys mostly lie outside the framework of official statistics, yet by this method their results could be linked to the results of official statistics (see § 78 and Chart 7 and 8).

30. Chart 1 shows only the linkage of the survey techniques. There are of course very close relationships also with economic and social statistics, as, e.g., with a quarterly observation of the economically active population in the various branches of economic activity and with the recording of the hours worked during the reference week. These are important data for determining the productivity of national economy.

THE RELATIONSHIP BETWEEN POPULATION REGISTERS, ADMINISTRATIVE RECORDS AND HOUSEHOLD SURVEYS

31. Population registers are one outstanding example for the use of computers for administrative purposes. Such registers can at least partly substitute current vital statistics and can be used for population counts at any moment in any regional breakdown. But it should be kept in mind that for statistics only the individual characteristics can be used which are kept in the register.

32. Besides the population registers which contain all inhabitants of a given region in a country other registers are set up for the registration of vital events, migration, etc. The administration aspect of these registers is shown on the left side of Chart 1. It demonstrates the use of civil registration and its interaction with the different tasks of public administration. The current population-register, for instance, incorporates the birth-register, the death-register, etc. The interaction of civil registration with the statistical system of population statistics is shown on the right side of Chart 1.

33. Furthermore registers are kept for special groups of the population. These registers for special groups of the population (e.g., physicians, employees, tax payers) are usually centralized. As far as to the characteristics of the individuals stored in the register they are just as inflexible as the population register.

34. It should be mentioned in this context, that it is necessary, of course, to co-ordinate the tabulation programmes of the statistics based on registers and the programmes of the census, household surveys, etc. Co-ordination means comparable definitions and classifications. The household surveys are much more flexible with regard to the definitions and classifications used. That means: They have to be adjusted to the definitions and classifications in the register (if statisticians are going to compare data from both sources).

35. Household and family statistics are one important part of population statistics, in many countries derived from household surveys. Therefore the question arises to what extent population registers can be used in this respect. This is not impossible, but it depends on the organization of the register and the organization of data input and storage. (If for instance the identification number of every child is stored together with the data of the father's and/or mother's family, family-statistics can be derived from the population-register.) Some information on family-formation and -dissolution can be gathered, if the population-register is linked together with the registration of vital events.

36. With the increasing use of administrative records for statistical purposes the general question arises of the relationship of statistical surveys, and multipurpose sample surveys in particular, to statistical information prepared from administrative records. The answer to this question must take account of the fact that the data on registers and administrative records, if available in a form suitable for automated handling, can theoretically be counted for any possible combination of characteristics at any time. Such counting operations can, however, cover only the characteristics contained in the administrative records or registers, whereas statistical surveys, in particular sample surveys, are flexible with regard to their list of characteristics and can be adapted to any set of questions which happens to be current. This relationship between the inflexibility in the statistical evaluation of registers or administrative records and the flexibility of statistical surveys should in the long-term have an influence on the statistical programme in general and the development of multi-purpose sample surveys on particular, a factor which should be taken into consideration in the planning of sample surveys to a greater extent in the future, both as regards their methodology and content.

37. However one should not think such surveys, however designed, can be regarded as a substitute for well organized administrative statistics. Any public system, e.g., a Health Service or an Employment Service (see Chart 2) will require its own inbuilt system of data recording and collection which enables those responsible for its efficiency to keep control of it and detect the effects of their actions. Sample surveys properly organized should clearly not be used to duplicate such data. They could be used in some circumstances as a substitute for them but their design will rarely make it possible to use them as a control instrument in the same way as administrative statistics derived from the working of the system can be so used.

38. On the other hand one should not think that such continuing multi-subject-surveys however they are organized can be regarded as a substitute for the detailed ad hoc study focussing on one problem and bringing the whole weight of the detailed interview or record to bear on it. For many survey researchers the ad hoc detailed inquiry dealing with a topic of public interest will always seem a more glamorous piece of work in many ways especially where the necessary resources are available (see Chart 2: e.g., special uni-subject inquiries on income and expenditure, housing conditions and facilities, etc.). However, such a survey is in many ways easier to carry out than the continuous multi-purpose survey where an adequate response and a standardised approach must be maintained without the stimulus of new subject matter or the long period of consideration and manipulation of data and reflection which intervenes between data collection and reporting on most single purpose surveys.

STATUS OF LABOUR FORCE SURVEYS IN THE CONTEXT OF NATIONAL STATISTICS

39. Information relating to employment is of importance under two different aspects. At the core of the social and the socio-political approach is the population and its participation in economic activity as broken down by demographic and social characteristics, while under aspects of economic policy it is primarily the production factor labour, and its connection with other economic and social factors, which is of importance. In many countries the system of employment statistics is orientated towards both objectives of investigation and has, as a result of national and international requirements, been steadily expanded. In developing the programme of official employment statistics, special emphasis was placed on ways and means to arrive at a well-balanced programme in material and regional respects, as well as in point of time.

40. In accordance with the demands made on the system of employment statistics, the following three sets of characteristics and groupings can be distinguished:

(a) characteristics and groupings of demographic and educational statistics,
(b) characteristics and groupings of employment and economic statistics, and
(c) characteristics and groupings of regional statistics.

41. Analysed with respect to these three sets of characteristics and groupings are the population census, the microcensus, the new employment statistics, the census of non-agricultural local units, as well as the major statistics pertaining to sectors of the economy. A survey of the characteristics covered in individual statistics shows where common features of coverage do already exist in the various employment statistics (see Chart 4).

42. In order to be able to meet the demands in point of time in connection with the technical and regional requirements, as far as this is methodologically, technically and organizationally feasible (in the FRG) a system was developed for employment statistics by which large scale censuses conducted at larger intervals only, annual statistics and others covering several years, and also the provision of data in the form of short-term current reports, supplement each other. At larger intervals, the observation of employment is performed on a person-related basis in the population censuses, on the basis of the persons engaged as collected via the local units in the censuses of non-agricultural local units and the different enumerations pertaining to individual sectors of the economy, as for example the censuses of agriculture, the censuses of production industries, the censuses of handicrafts, the censuses of distribution, etc. For the person-related current annual reports, the MPS is used, while major short and medium-term statistics with figures on the persons engaged are the industry reports, the

reports on the construction industry, the handicraft reports, wholesale and retail trade statistics, agricultural labour force statistics, etc. Additional material relating to the public sector will also be provided at intervals of one or several years by the new, considerably extended statistics of public service personnel, together with university and school statistics and statistics relating to the public health service. Still existing gaps in the inter-locking system of large-scale censuses and current short and medium-term reports will largely be filled by the new statistics on persons engaged (basis: social security records).

43. In addition to the different statistics averages of economically active persons in different breakdowns and for differing reporting periods are for instance required as reference values for macro-economic parameters, in order to compute the development of the national product per economically active person. Every computation of averages implies the availability of data for several key days - also from different sources - over the length of the period under consideration. The main emphasis of current estimations is at present on computations of annual, semi-annual and quarterly averages of the active population and of economically active persons in various breakdowns. The original material from which to proceed with the computations are the employment data collected in the large-scale censuses (population and occupation census, census of non-agricultural local units, census of agriculture, and others). For purposes of updating and interpolation of these data, all suitable short-term employment statistics are drawn upon. In addition to the MPS, these are predominately the results of the monthly establishment statistics.

44. Compared with the mentioned statistics the Labour Force Survey is the only method that can yield the type of information required on the labour force, employment, unemployment, underemployment, education, income and other related variables. It is less expensive than a population census though relatively more expensive in terms of population covered. It requires less field staff and can provide more and better information. The results can be used to up-date census data and to provide intercensal estimates. It permits the use of probing questions on a number of complex matters and the results can be made available more quickly than in the case of a population census. One major drawback is that the use of sampling makes it difficult to disaggregate figures too much and data on the micro-level are subjected to wide margines of sampling errors. The Labour Force Survey provide the only practicable means of collecting data from the large sector of own account workers which is important in predominantly agriculture countries.

45. Establishment surveys provide basic data on employment from payroll records. It provides information on amount of labour used in the industrialized sector of the economy. It has a major advantage: it is a method that can provide cheaply recent data on employment changes over time. It provides an excellent short-term economic indicator. Though ideally a benchmark is required (e.g., an industrial census), this is not a major drawback as the emphasis is on trends rather than levels. The use of sampling, e.g., the stratified cut-off sample method significantly reduces the cost of the operation while the rate of response and the quality of the replies increase. The major drawback is that it is limited to employment in the modern sector and thus leaves out the majority of the working population (in developing countries).

46. Other sources of information are the by-products of the administration of government departments. Employment service registers can provide some information on unemployment registration, social security records may be a useful source of information on employment and unemployment etc. They are all limited in scope but they can provide useful supplementary information on some aspects of the country's labour problems and should be studied in conjunction with other sources of information.

STATUS OF INCOME AND EXPENDITURE SURVEYS IN THE CONTEXT OF NATIONAL STATISTICS AND THE DEVELOPMENT PROGRAMME

(a) Evaluation of data

47. Income and consumption sample surveys cover all income and expenditure of private households. They thus supply important data for the assessment of the income situation and consumption, patterns of the population and its various constituent groups. Private households demand is an important factor in the economy and reliable information about it is indispensable not only for successful government trade cycle and structural policies but also for firms' production plans and marketing strategies. Income data are also important for social, taxation and family policies. Over and above this, the income and consumption sample survey supplies important information on households' living standards, e.g., on housing conditions, the supply of consumer durables and on assets and liabilities. These data are required not only to facilitate the governmental and parliamentary decision-making process: both sides of industry, consumer organizations, scientific institutions and business enterprises are dependent on reliable and detailed quantitative data for purposes of analysis, forecasting and planning. Estimates of the likely effects of income changes, tax increases or tax cuts, changes in consumer prices and social security contributions, etc., and of the influence of household consumption patterns on the economy cannot be made without information on household income, expenditure and saving patterns, recourse to credit facilities, tax payments and insurance contributions.

48. The income and consumption sample surveys may be built up an official statistical instrument that is unique in providing information on the relationships between income, consumption and savings formation on the one hand and important socio-economic household characteristics, such as social position and age of the head of household, size of household and type of household on the other. By aligning the statistics as far as possible with the concepts and classification systems of the National Accounts and by extrapolating from the MPS (Chart 3) the value of the results as general economic indicators has been considerably increased.

49. In view of the large number of potential consumers it is impossible to say to what extent and by whom the individual results are used for decision-making and for legislation, planning and analysis. This is particularly true in national administration: the data from sample surveys of income and expenditure are evaluated not only by government departments themselves, but also by many experts and institutes of sciences which draft expert opinions for the government. What follows can therefore only give examples of how the data are used.

(1) Information in income

The data produced by the income and consumption sample surveys respecting household and individual incomes are the main base data for most of the estimates of income distribution according to social groups or size classes. The same is true for the Factor analysis investigations and for investigations into possible ways of estimating progress in lifetime income on the basis of cross-sectional analyses also draw to some considerable extent on the income and consumption sample surveys. The sample surveys of income and consumption are drawn upon to an even greater extent when it is necessary to describe and analyse the economic situation of certain social groups: the "poor", pensioners, the recipients of other state transfer payments, etc.

(2) Information on private expenditure

The results of the survey of private expenditure are the main factor in the calculation of the shopping basket for the price index of all private households. They are also used to check and supplement the results of the calculation of private expenditure by use in the context of the National Accounts. Of the many other purposes, for which these data are used, an important one is their evaluation for the food, drink and tobacco market, including aspects of nutritional physiology, which appears in, among other things, the report on nutrition by the Society for Nutrition and in many other publications. General functions of consumption can also be derived from these data. Finally, the data on private expenditure are used by many ministries for ad hoc investigations such as the compilation of statistics on energy consumption during the oil crisis.

(3) Information on the growth of savings

The information on the amount and nature of savings as a function of household characteristics, in particular the age and social status of the head of households, provided by the sample surveys of incomes and consumption has contributed appreciably to the preparation, development and monitoring of national measures to promote savings, particularly measures to boost workers' savings.

(4) Information on wealth

The sample surveys of income and consumption are often the only ones which allow the wealth of private households to be combined with household characteristics of the most varied types. Although the institutional population, foreigners and high income households are not covered, many calculations of personal wealth distribution are based on the results of the sample surveys of income and consumption, for the reasons given.

(5) Consumer durables in households

The results of the sample surveys of income and consumption with regards to selected durables in households are for many large companies, in particular the motor car and electric equipment industries, a major source of information for market research and the development of market strategies, as the size of the sample survey - unlike the usually much smaller surveys, conducted by other institutes - makes multiple combination of household possible.

(b) Use of administrative records for collecting data on the level and distribution of income - in comparison to household budget surveys

50. A second data source for collecting data on the level and distribution of income consists of the statistical information contained in a number of administrative records, particularly tax returns, sometimes supplemented by other records such as those kept by social insurance bodies (Chart 2). These documents can be processed in two ways: complete processing of all tax returns or selection and use of a representative sample of all returns (surveys on tax records).

51. Complete processing of tax returns is of practically no interest for the development of social indicators. The data obtained do not concern disposable income (or even pre-tax pre-transfer income) but relate to taxable income defined by strictly fiscal procedures, adjustment of which is pointless in view of the impossibility of making imputations or direct corrections on all returns. Moreover, this is a very cumbersome procedure, which is merely a derivative of the tax statistics. Nevertheless in some countries it is practically the only source available and is moreover used in attempted international comparisons, which is clear evidence of their present limitations.

52. The tax record survey is the main data source for a number of countries. Other countries also make extensive use of this type of source, in addition to household surveys.

53. A comparison of incomes declared in a household budget survey with incomes declared to tax authorities in France showed the following conclusions:

(1) The tax authorities data for the agricultural population are virtually meaningless. The determination of agricultural incomes is in any event very difficult in the absence of proper agricultural enterprise accounts. While the income level as ascertained by the household budget survey is on average closer to the level of consumption than the average taxable income, it is clear that the interviewers had great difficulty in evaluating it: there is therefore very little correlation between farmers' incomes and their expenditure.

(2) To a lesser degree, the same difficulty arises in the case of the self-employed, but in their case, the fiscal pressure and the standard of living are, on average, much higher.

(3) As regards the wage-earners, in the case of the less well-paid categories the incomes declared for tax purposes are lower than the incomes declared in the household budget survey; the difference narrows on moving up from the manual worker or office employee group to the executive-supervisor category, and for senior management the converse is found.

54. The overall results of the two surveys were fairly close, although the household budget survey figures showed less dispersion than those of the tax authorities. If only the matched (i.e., identical) households are taken into consideration, however, the result is quite different: incomes as found in the household budget survey are distinctly higher than those in the tax authorities' survey. This difference is much less marked if agricultural households are excluded, but nevertheless still subsists.

STATUS OF HEALTH SURVEYS IN THE CONTEXT OF NATIONAL STATISTICS

55. In some countries, many of the statistics needed to measure progress in reaching health objectives of policy programmes may be obtained from medical records of hospitals, physicians, clinics, and other health care centers, and from mortality and morbidity reports required by government regulations. Clinical tests and medical examinations of a sample of the population may be another source of the medical data. Where such sources are not available or feasible, data can appropriately be collected in household surveys. Furthermore, there are some facts which can be learned only from household members, such as those concerning the circumstances and outcome of an illness or injury and the action taken by the individual. In addition this source provides a very valuable possibility for linking data on health with other social characteristics.

56. Error of response is a major limitation to household interviews. This is particularly true in the queries on morbidity. For diagnostic information, the householder can at best pass on to the interviewer only the information the physician has given to the family if indeed there has been attendance by a physician. For unattended illnesses and injuries, the respondent can provide only a description of the symptoms. Some of the detail, such as the duration of illness, cause of injury, and days lost from usual activity, give some indication of the seriousness of the illness or injury. Considerable study of the validity of responses to survey questions on illness would need to accompany the development in countries where the household survey technique is relatively new.

57. Morbidity statistics in general is gaining more and more weight. Prevalence and incidence are being measures through "case" and "person" statistics. The case statistics include cases of disease, accident, and disability, so that one person could be counted several times. The person statistics, however, determine deseases or injuries, or disabilities affecting one person.

58. The case morbidity statistics serve only a limited purpose. Either they include only certain types of diseases (e.g., statistics of notifiable diseases), or only particular groups within the population (e.g., statistics of types of diseases by the statutory health insurance). The various case morbidity statistics carried out in the Federal Republic of Germany are separately shown in Chart 5. These are current statistics published by the administration and/or official statistics from ministries or other insurance bodies. In addition, attention has to be paid to the statistics of recognizable congenital and stillbirth malformations, collected on the basis of reports, especially by medical doctors and midwives assisting at delivery.

59. The person morbidity statistics, on the contrary, provide important information of the state of health of the population, particularly as details about demographic and social-economic background on the persons suffering from disease or injuries (caused by an accident) can be obtained. Of the three stages Surveys of the population, Surveys at G.P.s' surgeries, Surveys in hospitals, only the first method is being used nationwide for the whole population in multi-purpose household surveys (MPS) or special household surveys. Surveys at G.P.s' surgeries, or medical examinations, are very time consuming and involve a lot of work. So experience in this field is limited and only available through statistics on protection of the juvenile workers (of some regions) and statistics of the first medical examination of military recruits (minor disabilities).

60. Surveys in hospitals include only selected cases and/or injuries from accidents. The resulting reduction in the number of investigations is, however, counterbalanced by the simplicity of the method and the relative reliability of diagnosis.

61. Household Surveys have the obvious advantage of showing the state of health of the population in the widest sense. In contrast to the other methods, morbidity can also be determined when no GP is being consulted or hospital assistance sought.

62. In many countries, population surveys (enquiries by lay people) were made in addition to population random samples. This combination allows one also to consider the demographic and socio-economic background of the person suffering from disease. The problems of population random samples result on the one hand from putting questions to lay people, and on the other hand from carrying out the survey by lay people.

THE ROLE OF HOUSEHOLD SURVEYS IN PROVIDING INFORMATION FOR POLICY PLANNING

(a) Users of survey data in developing countries

63. The role of household surveys in providing information for policy planning, bend mark information for developing programmes, current information for monitoring programmes and post facto information is emphasized in Chapter 4 (uses of survey data) of the NHSCP-Prospectus. We would like to refer to this remark. As it is mentioned there, a lot of socio-economic data of nearly all UN-recommended topics and items derived from household surveys have been found most useful and effective in response to this demand.

(b) Supplementary surveys to the continuing Household Survey (Microcensus)

64. The Microcensus took on the essential characteristics of a "multi-purpose sample survey", as a result of the wide variety of topics which were surveyed and analysed under supplementary programmes (authorized by Orders).

65. As Chart 6 shows, the supplementary programme covers a wide range of very varied topics. It extends from questions of health and social welfare, via leisure and training questions, characteristics of the physical and urban environment (including working conditions) to questions on the social and spatial mobility of specific population groups. The supplementary sets of interviews set out to cover either all the persons already included in the basic programme or a portion of them. This portion may be either a specific age group or a specific portion of the working population (e.g., employees or working mothers) or some other population group, which can be clearly defined by characteristics contained in the basic programme. The supplementary set of interviews may also set out to cover a specific group of families (e.g., families with children under 15 years of age) or households (e.g., households the head of which is a foreigner or a civil servant) or a portion of the inmates of homes and similar institutions (e.g., the inmates of retirement homes and nursing homes, a particularly informative group for the purposes of the care of the old). Every supplementary survey of this type must be examined in advance to determine whether the sample size may be set below the maximum sample used in the basic survey (1 per cent), particularly for reasons of cost, i.e., whether a lower sample size (e.g., 0.5 per cent, 0.25 per cent or 0.1 per cent), will still give significant results at Federal or Land level. The criteria are the size of the group of persons to be surveyed and the required sub-division of the programme by topic and region.

66. Basically, the motive behind every supplementary survey is a request from a Federal Ministry for statistical information on a political decision, either one which has already taken place or one which is still in preparation. As part of the justification for the new Microcensus Law, for example, the legislature regarded the results of the "diseases and accidents group" as essential both for considerations of health policy and as part of the overall system of morbidity statistics, since they provide knowledge on the morbidity of the population and on changes in the disease pattern which cannot be obtained at the present time by any other method. As a result of the positive experience obtained with this group of topics, the supplementary surveys of this type are to be widened by the addition of groups of questions relevant to health policy. These include in particular the detection of the major risk factors and indicators in the population, such as food and smoking habits, negative environmental factors, etc., as well as information on the extent to which the health services are called upon, such as the frequency and type of contracts with doctors and the extent to which the population makes use of the preventive and early warning measures available.

67. All the other supplementary programmes, either already carried out or in preparation, are of similar significance for the government's planning activities. This applies equally well to the supplementary surveys which also obtain opinions and intensions of the subjects. To date it has been possible to put questions of this type only in three surveys carried out during the period 1971/78. In the 1978 sample survey on housing, linked with the microcensus, questions were put for the first time on the relationship of the dwellings to their environment, on noise or smell nuisances, etc. These are questions which taken in conjunction with the data on family strcutures are also significant for the procurement of social indicators; for example, questions on the subjective assessment of opportunities for children to play, shopping facilities, the distance from the place of work or the accessibility or otherwise of public transport. In some cases these could be "checked" by objective questions, relating to the selected area concerned and submitted for answer to the administration of the relevant local area or town.

68. A wide-ranging supplementary survey on the "changes in occupational and social levels in the population" was intended to permit the question of the subjects' own assessment of their occupational position by comparison with that of their fathers to give a subjectively slanted indication of the degree of inter-generation mobility possible. The objective of the survey on the "parents' educational intentions for their children" was to investigate the type and influence of the family structure which determine the scholastic and vocational education of children and young persons. Only if such knowledge is obtained, in the view of the Federal Government's report on families, will it be possible to take effective measures under family and educational policies.

THE ROLE OF HOUSEHOLD SURVEYS AS A BASIS FOR ANALYTICAL, ATTITUDINAL, BEHAVIOURAL AND DIAGNOSTIC RESEARCH

69. The preceding description of the microcensus as a multi-purpose sample survey and thus also as an instrument for obtaining information on social indicators requires some further general comments so as to throw light on the preconditions and possibilities of such a survey. Of note here are on the one hand the linking of the microcensus to the statistical study of population, and on the other the current trends in official statistical studies. The linking of the microcensus with the large-scale population censuses is one of the major factors in the statistical study of population as a whole (Chart 1 and 8). Starting from the latest population census, therefore, the microcensus may be regarded methodologically speaking as a network of interlocking interviewing stages, all related to one another and some of them of increasing intensity. A major theoretical pre-condition for such a network of statistical surveys is the fact that the current sampling plan of the microcensus (based on the principle of area sample surveys) is equally representative of persons, families, households, dwellings and buildings, since the recording areas cover only complete buildings. This type of network may be imagined in the form of a pyramid (Chart 7). Using the example of a supplementary survey covering the care of children of working mothers, this chart shows how such a survey of a specific group of women who are employed and have children under 14 years old may be linked with the results of corresponding comparative groups for which the principal data are available from the microcensus and where applicable from the population census, and also with more detailed information from follow-up (not necessarily official) surveys of different kinds (incl. special opinion surveys).

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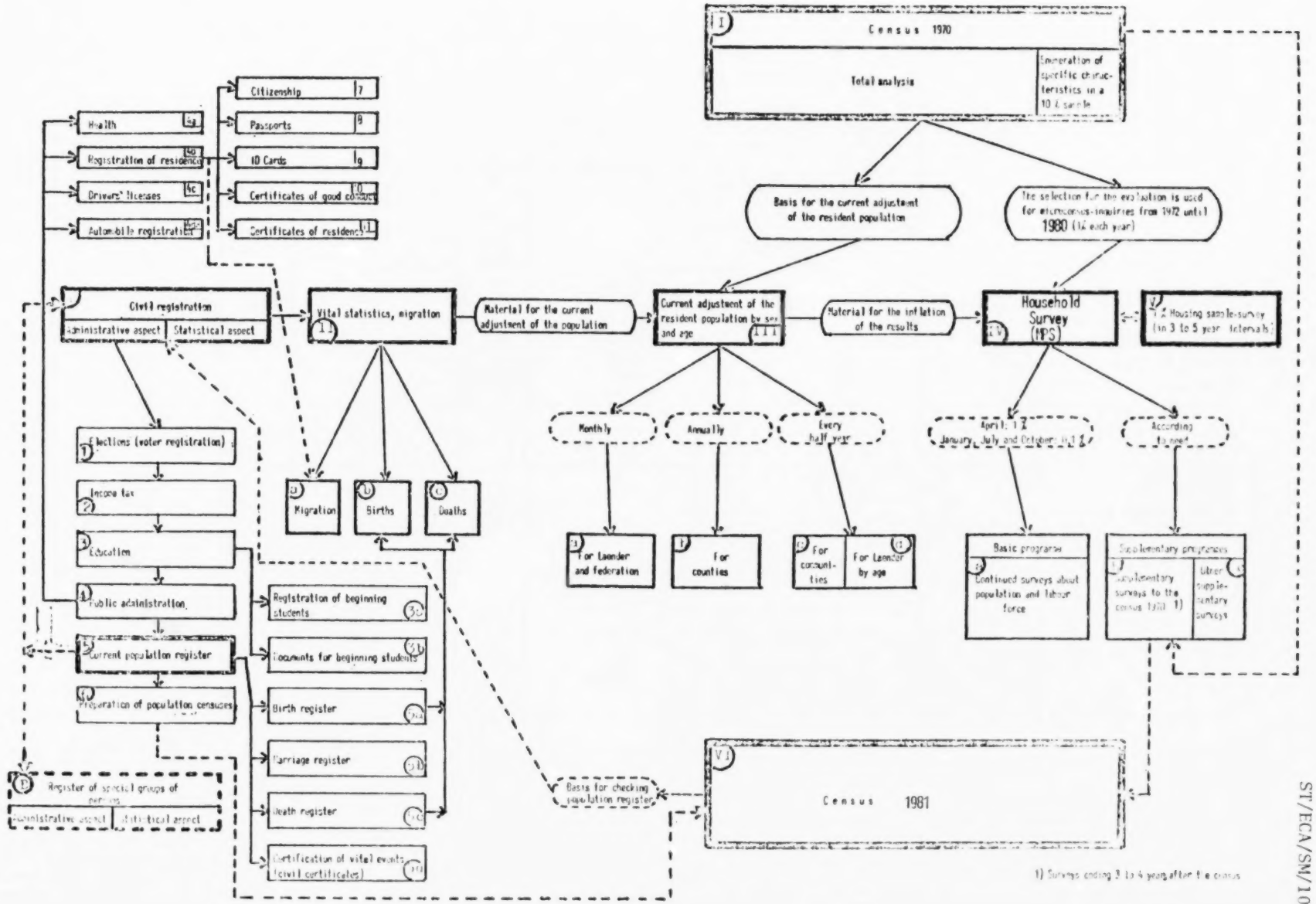
Chart 1: System of population statistics, intercensal household surveys, civil registration and tabulation registers


I
Census 1970
Total analysis
Enumeration of specific characteristics in a 10 % sample
Basis for the current adjustment of the resident population
The selection for the evaluation is used for microcensus-inquiries from 1972 until 1980 (1% each year)
Citizenship 7
Passports 8
ID Cards 9
Certificates of good conduct 10
Certificates of residence 11
Health 4a
Registration of residence 4b
Drivers' licenses 4c
Automobile registration 4d
Civil registration
Administrative aspect
Statistical aspect
Vital statistics, migration 11
Material for the current adjustment of the population
Current adjustment of the resident population by sex and age 111
Material for the inflation of the results
Household Survey (HPS) 12
1 % Housing sample-survey (in 3 to 5 year intervals) 13
Monthly
Annually
Every half year
April, 1 %
January, July and October: 0,1 %
According to need
Elections (voter registration) 1
Income tax 2
Education 3
Public administration 4
Current population register 5
Preparation of population censuses 6
Register of special groups of persons
Administrative aspect
Statistical aspect
Migration D
Births G
Deaths C
Registration of beginning students 3a
Documents for beginning students 3b
Birth register 21a
Marriage register 21b
Death register 21c
Certification of vital events (civil certificates) 21d
For Laender and federation
For counties
For communities
For Laender by age
Basic programme
Continued surveys about population and labor force
Supplementary programmes
Supplementary surveys to the census 1970 1)
Other supplementary surveys
Basis for checking population register
VI
Census 1981
1) Surveys ending 3 to 4 years after the census

ST/ECA/SM/10

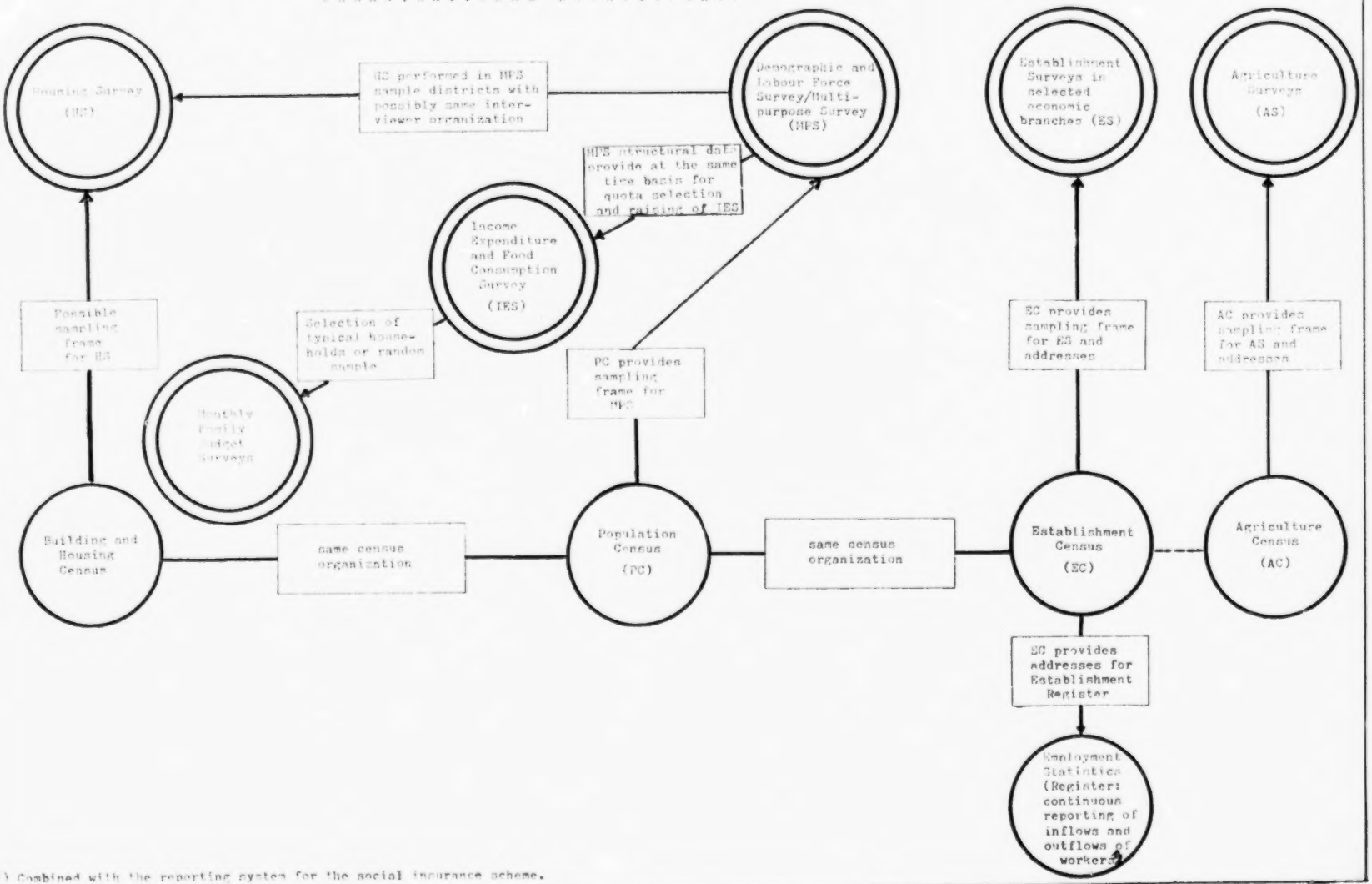
Chart 2: Possible courses of reporting for securing person or household-related data

No.	Topic	Possible courses of reporting										
		Household Surveys (Type of inquiry)			Non-Household Surveys (Establishment and other Surveys)	Censuses		Administrative records				
									Special records (e.g.)			
		Continuing (multi-subject)	Supplemental (multi-subject)	Special (uni-subject)		Population and Housing	Establishment[2] (and others)	(Public) general register[3]	Labour Office	Hospital	School University	Tax returns
1	Demographic characteristics [1]	x	x		(x)	x		x	(x)			
2	Labour Force	x	x		x	x	x	x	x			
3	Income and Expenditure		x	x	x	(x)	(x)	x				x
4	Food Consumption and Nutrition		x	x	x (Producer, tradesman)							
5	Housing Conditions and Facilities	x	x	x		x		x				
6	Health		x	x				x		x		
7	Educational characteristics		x		(x)	x			(x)		x	
8	Household economic activities (Household enterprises)	(x)	x		x	x	(x)					

1) Incl. fertility, mortality, migration.- 2) Agriculture and other economic censuses.- 3) E.g. Population Register (No. 1), old age insurance records (2,3), estate and building register (5), health service and insurance records (6).

Chart 1: ROLE OF HOUSEHOLD (AND ESTABLISHMENT) SURVEYS IN NATIONAL STATISTICAL SYSTEMS

ORGANISATIONAL RELATIONSHIP


Housing Survey (HS)
HS performed in MFS sample districts with possibly same interviewer organization
Demographic and Labour Force Survey/Multi-purpose Survey (MFS)
Establishment Surveys in selected economic branches (ES)
Agriculture Surveys (AS)
MFS structural data provide at the same time basis for quota selection and raising of IES
Income Expenditure and Food Consumption Survey (IES)
Possible sampling frame for HS
Selection of typical households or random sample
Monthly Family Budget Surveys
PC provides sampling frame for MFS
EC provides sampling frame for ES and addresses
AC provides sampling frame for AS and addresses
Building and Housing Census
same census organization
Population Census (PC)
same census organization
Establishment Census (EC)
Agriculture Census (AC)
EC provides addresses for Establishment Register
Employment Statistics (Register: continuous reporting of inflows and outflows of workers)

1) Combined with the reporting system for the social insurance scheme.

Chart 4: Selected characteristics and groupings of major statistics covering economically active persons and/or persons engaged

Characteristics and groupings	Population census	Labour Force Survey (MPS)	Employment statistics*)	Census of non-agricultural local units	Census of agriculture	Census of industry	Census of building industry	Census of handicrafts	Census of distribution	Statistics of labour in agriculture	Industry reports	Building reports	Reports on handicrafts	Statistics of public service personnel
Characteristics and groupings relating to demographic and educational statistics														
Sex	x	x	x	x	x 1)2)	x	x	x	-	x	-	-	-	x(every 3 years)
Age (year of birth)	x	x	x	-	x 1)2)	-	-	-	-	x	-	-	-	x(every 6 years)
Nationality	x	x	x	x		-	-	-	-	-	-	-	-	-
Marital status	x	x	x	-	x 1)2)	-	-	-	-	-	-	-	-	x(every 6 years)
Family/household structure	x	x	-	-	x	-	-	-	-	-	-	-	-	-
Education	x	x(planned)	x	-	x 3)	-	-	-	-	-	-	-	-	-
Characteristics relating to employment and economic statistics														
Branch of industry	x	x	x	x	x	x	x	x	x	x	x	x	x	x central government annually, communities every 3 years (functions)
Size of establishment	x (of self-empl.)	-	-	x	x	x	x	x	x	x	x	x	-	-
Occupation	x	x	x	-	-	-	-	-	-	-	-	-	-	x
Social status - Socio-economic structure (status in the local unit, employment status, service and employment relationship)	x	x	x	x	x 1)	x	x	x	x	x	x	x	-	x
Manhours/hours worked and/or full-time or part-time employment	x	x	x	-	x 1)2)	-	-	-	x	x	x	x	-	x
Secondary activities	x	x	x	-	x 1)	-	-	-	-	x	-	-	-	-
Principal means of subsistence of economically active persons	x	x	-	-	x 4)	-	-	-	-	x 4)	-	-	-	-
Characteristics and groupings of regional statistics														
Place of work	x (on commuting)	x (on commuting)	x	x	x	x	x	x	x	x	x	x	x	x
Place of residence	x	x	-	-	-	-	-	-	-	-	-	-	-	-
Commuter status	x	x	feasible under certain conditions	-	-	-	-	-	-	-	-	-	-	-
Means of transportation used	x	x(planned)	-	-	-	-	-	-	-	-	-	-	-	-
Time required	x	x(planned)	-	-	-	-	-	-	-	-	-	-	-	-
Federation	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Land	x	x	x	x	x	x	x	x	x	x	x	x	-	x
Administrative district	x	x(sel. characteristics only)	x	x	x	x	x	x	x	-	x	x	-	-
Kreis	x	-	x	x	x	x	x	x	x	-	x	x	-	x(every 3 years)
Community	x	-	x	x	x	-	x	-	-	-	-	-	-	-
Non-administrative territorial units	x	x	-	x	x	-	-	-	-	-	-	-	-	-

1) Proprietor and members of his family, relatives and in-laws living on the holding.- 2) Permanent hired labour of agricultural or forestry holding.- 3) Operator and person responsible for the operation of the household of the holding.- 4) Proprietor and/or spouse.

*) Basis: social security records.

Chart 5: Survey of morbidity statistics in the Federal Republic of Germany

Item	Cases											Persons		
	Notifiable deases			Total stat. on Rehabilitation	Rehab. measures (im prep.)	Disabled persons (in prep.)	Road Accidents	Statutory Acc. Ins.	Statutory Old Age Ins.	Types of diseases acc. to Statutory Health Ins.	Private Health Ins.	Phys. disabled persons	Persons sick or injured by accident	Diseases and Accidents
	Tuberculosis	Epidemic diseases	venereal diseases											1970 - 1982
1. Survey bases														
1.1 Legal foundation		Law		Adm. records	Law		Law	Administrative records						Edict
1.2 Periodicity (period under review)	quart., ann.	mthly., quart, ann.	quart., ann.	annually		every 5 yrs.	mthly., ann.	semi., ann., ann.	annually					April (stagged 4 week period)
1.3 Respondents	tb-agencies of Health Offices	Healt Offices		Selected bodies for Rehabilitation	Bodies for Rehabilitation	Pension Offices	Police Offices	Insurances		Stat. health ins.	Private health ins.			Households
1.4 Sampling fraction	not applicable													1 %
2. Survey characteristics														
2.1 Medical statistics 2.1.1 Enumeration item	Prevalence	Incidence		Cases of rehabilitation		Prevalence	Incidence	Incidence/ at time beneficiaries, industrial diseases	New pensioners	Cases of incapability of work	Benefit (DM)	Prevalence	Prevalence/ Incidence	Prevalence Accident: Incidence
2.1.2 Type and cause of morbidity 2.1.2.1 Type of disease	defined by law			-	-	-	-	-	ICD	Diagnosis code: Bodies of Social Ins.	Hamburg diagnosis code	-	Diagnosis code: Bodies of Social Ins.	Diagnosis code following ICD
2.1.2.2 Type of accidental injury	-	-	-	-	-	-	by degree of severity	-				-		
2.1.2.3 Category of accident								+		+		+	+	+
2.1.2.4 Type of disablement	-	-	-	ICD possibly modified ICD			-	-	-	-	-	+	-	-
2.1.2.5 Cause of disablement	-	-	-	+	+	+	-	-	-	-	-	+	-	+/-
2.1.3 Duration of sickness	-	-	-	Duration of rehabilitation		-	-	-	+	Duration of incapability of work	Duration of stay in hospital	+	+	+
2.1.4 Type of treatment	-	-	-	+	+	-	-	-	+	+	-	-	+	+
2.1.4.1 In-patient	-	-	-	+	+	-	-	-	+	+	-	-	+	+
Out-patient	-	-	-	-	-	-	-	-	+	+	-	+	+	+
2.1.5 Other characteristics	-	-	former illnesses	Result of rehabilitation, measures, reduced capability of work		-	-	Reduced capability of work	-	-	-	Reduced capability of work		Confinement to bed
2.2 Population statistics														
2.2.1 Age	+	+	+	+	+	+	+	+	+	+	- (childr.)	+	+	+
2.2.2 Sex	+	+	+	+	+	+	+	+	+	-	+	+	+	+
2.2.3 Marital status	-	-	-	-	-	poss.	-	-	+	-	-	+	+	+/-
2.2.4 Family Size	-	-	-	-	-	-	-	-	+	-	-	+	+	+/-
2.2.5 Nationality	+	-	-	-	+	+	-	+	-	-	-	-	-	-
2.3 Employment statistics 2.3.1 Economic activity	-	-	-	+	+	+	-	+	+ (disability to work)	-	-	+	+	+/- disability to work
2.3.2 Employment statistics	-	-	-	+	+	+	-	-	-	-	-	+	+	+/-

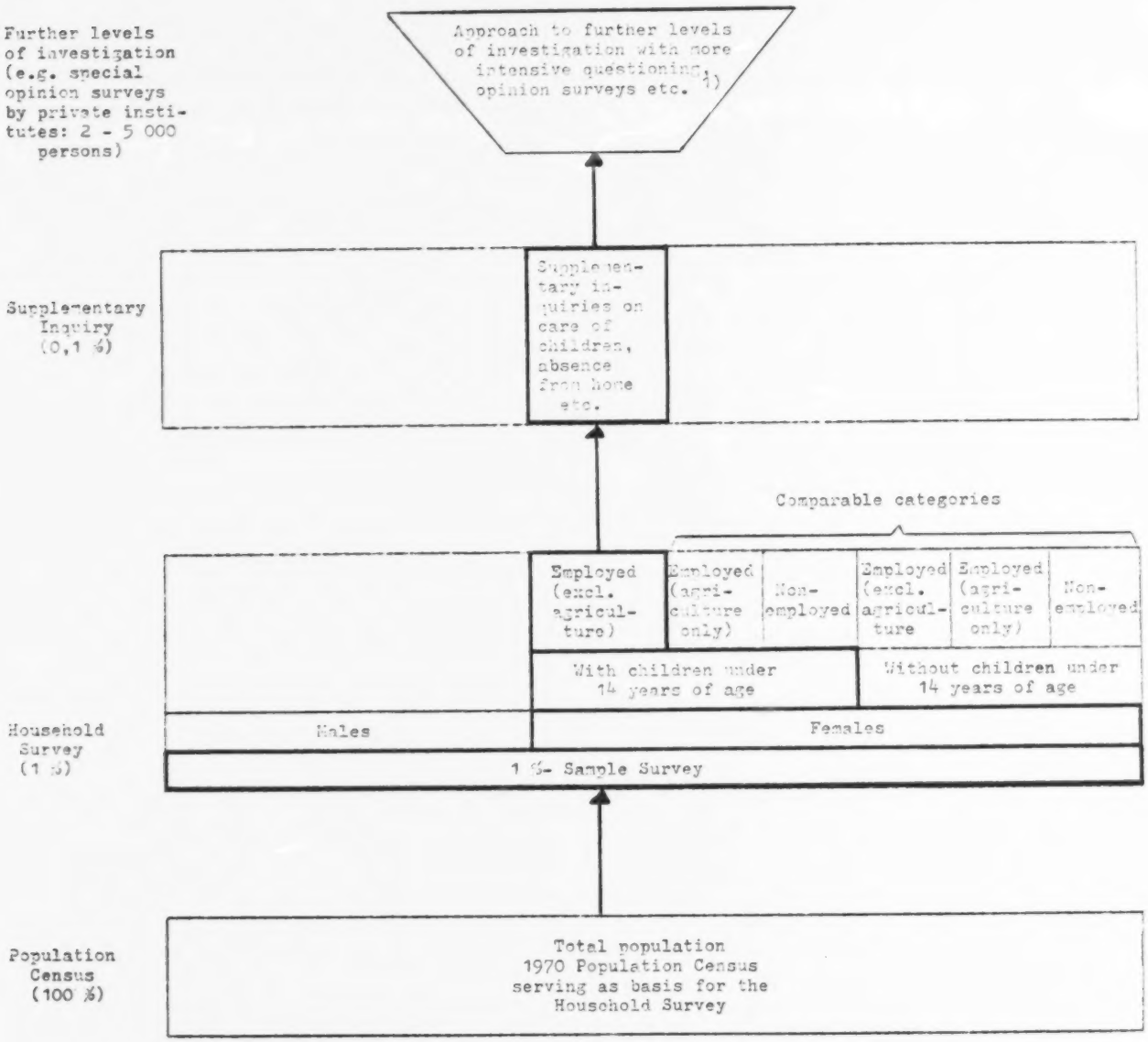
Abbreviations: + = data available
- = no data available

Chart 6: Supplementary Surveys to the continuing Household Survey (Microcensus) and Special Household Surveys

Series No.[1]	Topic - Title of the sample survey	Sampling fraction (per cent)
1	Basic Program: Demographic characteristics and basic items of the other UN-topics	1.0
2 (a)	Employment	
	- Weekend commuters	1.0
	- Characteristics and functions of activity of economically active persons	0.1
	- Extent of leave according to labour-managment contract	0.1
	- Night and Sundaywork	1.0 and 0.1
	- Termination of the working time on weekend	0.1
2 (b)	Social Mobility	
	- Economic activity of woman 40 to 65 years of age	0.5 - 1.0
	- Occupational and social mobility of the population	1.0
	- Occupational mobility of women	0.1
3 (a)	Income and Expenditure Survey (Special Household Survey)	0.25
3 (b)	Saving	
	- Property effective saving	1.0 / 0.1
4	Food Consumption and Nutrition	
	- Cultivation of vegetables and potatoes on plots of under 0.5 hectares	1.0
	- Purchasing facilities and bying behaviour in large cities	0.1
5	Housing Survey (Special Household Survey)	1.0
6	Health	
	- Illness and accidents	0.5 - 1.0
	- First-aid training	0.1
	- Accidents involving children and juvenile aged under 15 years	1.0
	- Physical and mental dissability	0.25
	- Physical and mental dissability of children	1.0
7	Education	
	- Care of children under 15 years of age of working and nonworking mothers	1.0 and 0.1
	- Vocational training	1.0
	- Vocational and continuing training	1.0
	- Educational aims envisaged by parents for their children	0.1
8	Others	
	- Holiday and recreation trips	1.0
	- Holders of driving licences; utilization of the licences	1.0
	- Short trips and day's excursion traffic	0.1

1) See Chart 2.

Chart 7: Integrated System of Household Surveys as an example of multilevel inquiries


Further levels of investigation (e.g. special opinion surveys by private institutes: 2 - 5 000 persons)
Approach to further levels of investigation with more intensive questioning, opinion surveys etc. 1)
Supplementary Inquiry (0,1 %)
Supplementary inquiries on care of children, absence from home etc.
Comparable categories
Employed (excl. agriculture)
Employed (agriculture only)
Non-employed
Employed (excl. agriculture
Employed (agriculture only)
Non-employed
With children under 14 years of age
Without children under 14 years of age
Household Survey (1 %)
Males
Females
1 %- Sample Survey
Population Census (100 %)
Total population 1970 Population Census serving as basis for the Household Survey

1) E.g. required for the calculation of subjective social indicators.

Chart 1: System of statistical observation of population processes in the Federal Republic of Germany